

# **RADIATION DETECTOR WITH MICROPHOTONIC OPTICAL SWITCHES TO ROUTE LIGHT IN AN IMAGING SYSTEM**

## **Abstract of Disclosure**

An Radiation detector employs one or more arrays of microphotonic light transmission devices to selectively control the flow of light from different detection sites in a scintillator into an optical conduit. For example the microphotonic light transmission devices may be microelectromechanical steerable mirrors or light gates. Instead of employing a separate detector element to convert the light from each site into an electrical signal that is then switched into a data acquisition system, the present detector assembly switches the light into the optical conduit to the data acquisition system.